

REMARKS

By this amendment, claims 1-4 have been canceled, and claims 5-9 have been added. Thus, claims 5-9 are now active in the application. Reexamination and reconsideration of the application are respectfully requested.

The specification has been carefully reviewed and revised to make grammatical and idiomatic improvements in order to aid the Examiner in further consideration of the application. The amendments to the specification are incorporated in the attached substitute specification. No new matter has been added. Also attached hereto is a marked-up version of the changes made to the specification by the current amendment. The attachment is captioned “**Version with marking to show changes made.**”

In item 1 on page 2 of the Office Action, the Examiner acknowledged the claim for foreign priority under 35 U.S.C. 119(a)-(d), but pointed out that the prior application has not been referenced in either the specification or the application data sheet. The requirement under 37 C.F.R. §1.78(a)(2)(iii) that “...the reference required by this paragraph must be included in an application data sheet (§1.76), or the specification must contain or be amended to contain such reference...” is used to “...claim the benefit of a prior-filed copending nonprovisional application or international application designating the United States of America...” 37 C.F.R. §1.78(a)(1). The foreign priority document is neither a copending, nonprovisional U.S. application nor an international application designating the U.S. The Applicant’s claim of foreign priority is made under 37 C.F.R. §1.55 which states that “The claim must identify the foreign application for which priority is claimed ...by specifying the application number, country (or intellectual property authority), day, month, and year of its filing.” 37 C.F.R. §1.55(a)(1). The Applicants respectfully submit that the requirements to claim priority benefits under 35 U.S.C. §119 are satisfied by the executed Declaration and Power of Attorney for U.S. Patent Application filed with the present application.

In items 2-3 on pages 2-3 of the Office Action, claims 1-4 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner did not see any biasing member in drawing Figure 1 that could be used to bias the

two racks in an arrangement so to hold the pinion teeth. This rejection is respectfully traversed. With exemplary reference to drawing Figure 5, the biasing member is formed by the engagement of two counter nails 14a and 14b on the intermediate joint section 11 of the rack structure when the intermediate joint is folded to align the two toothed bars 8 and 9. While the counter nails are not depicted in Figures 1 or 2, they are depicted in Figures 4(a), 4(b), and 4(d), and depicted in the engaged configuration in Figures 3(c) and 5. Furthermore, the proper configuration of the counter nails and their function as biasing member is described in the specification, for example on page 5, first paragraph, with specific reference to drawing Figure 5. Thus, it is submitted that the specification satisfies all the requirements of 35 U.S.C. §112, first paragraph.

In item 4 on page 3 of the Office Action, claims 1-4 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. This rejection is now believed moot in view of the cancellation of claims, and furthermore the new claims have been carefully drafted in view of the Examiner's comments in the Office Action to comply with all of the requirements of 35 U.S.C. §112, second paragraph.

In items 5-6 on pages 3-4 of the Office Action, claims 1-4 were rejected under 35 U.S.C. §102(b) as being anticipated by Isshiki *et al.* (US 5,218,592). This rejection is now believed moot in view of the cancellation of claims 1-4. Furthermore, this rejection is believed inapplicable to new claims 5-9 for the following reasons.

For the Examiner's convenience, exemplary reference is made to the drawings in the present application. The scope of the claims is not intended to be limited to any embodiment depicted therein. Referring to drawing Figure 2, claim 5 sets forth a rack structure comprising a first toothed bar 1, a second toothed bar 2 and an intermediate joint made of a resin material 3 which joins proximal ends of the two toothed bars 1 and 2. As depicted in drawings Figure 4(a) and Figure 4(b), the intermediate joint 11 is formed with a first nail 14a and a second nail 14b. Configured as in drawing Figure 1, the first toothed bar and the second toothed bar are longitudinally offset a distance A with respect to each other. In this configuration, as shown in drawing Figure 3(c), the two nails contact each other. When the teeth of a pinion gear are

inserted into the teeth of the first and second toothed bars, which aligns the toothed bars, the two nails 14a and 14b engage each other and exert an opposing bias force, illustrated in drawing Figure 5, which causes the teeth of the pinion gear to be gripped between the teeth of the two toothed bars 8 and 9. Thus, the present application discloses an improved rack which, while simultaneously simple in design and small in size, eliminates backlash in the rack-and-pinion.

Isshiki *et al.*, with exemplary reference to drawings Figure 18 and Figure 19 contained therein, discloses a rack structure comprising a first toothed bar 81 and a second toothed bar 82. A composite intermediate joint structure comprises: openings 86b and 88b in toothed bars 81 and 82, respectively; projections 86 and 88, inserted into openings 88b and 86b, respectively; a spring 154 extending between projections 86 and 88; and inward protrusions 86a and 88a, located on projections 86 and 88, respectively, configured so as to hold spring 154 between them. The composite intermediate joint structure connects the two toothed bars 81 and 82, and biases them towards an offset position thereby allowing the teeth of a pinion gear to be gripped between the teeth of the two toothed bars 81 and 82. However, Isshiki *et al.* does not disclose two nails formed on the intermediate joint which contact each other so as to cause a restoring force when the first and second toothed bars 81 and 82 are displaced relative to one another. Even if the protrusions 86a and 88a are characterized as nails, as disclosed by Isshiki *et al.* they are merely two of the elements required to hold the spring 154 in place. They do not contact each other, and do not provide a biasing force.


Thus, it is believed apparent that Isshiki *et al.* does not anticipate the present invention. Furthermore, it is submitted that the above-mentioned differences are such that the prior art of record provides no teaching or suggestion that would have motivated a person having ordinary skill in the art to modify Isshiki *et al.* in such a manner as to result in or otherwise render obvious the present invention. Therefore, it is respectfully submitted that claim 5, as well as claims 6-9 depending therefrom, are clearly allowable over the prior art of record

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. An early notice thereof is earnestly solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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